

ored arc of a circle convex to the sun was observed. Where the faint halo of 90° radius intersected the ring of white light, the arcs and the outer two mock suns were of bright white light.

During this time the sky was partly covered with a thin veil of cirrus and cirro-stratus clouds from the north.

THE SOLAR HALOS AS SEEN AT GARNETT, KANS.

By D. D. JUDY, Cooperative Observer.

On February 24, 1914, beginning with 9:30 a. m. [90th meridian time] two solar halos were seen in the sky. As shown by figure 3 there was a small one around the sun colored like the rainbow, that lasted but a short time and

a large white circle extending from the sun northward, with 2 sun dogs, one on each side of the sun.

[Features of special interest in the observations above reported are:

(1) In the phenomenon seen at Topeka, the overlapping of the 22° halo and its upper tangent arc. Similar observations have sometimes been reported in connection with the 46° halo, or, properly speaking, the "upper bitangent arc" of this halo, seen overlapping the circumzenithal arc, but this appearance in connection with the 22° halo seems to be new to science.

(2) In the Iola observation the arcs of the 90° halo, with paranthelia. This is the rare "halo of Hevelius," which was also reported in connection with the remarkable halos of November 1-2, 1913.—[C. F. T.]